

CLAIMS

[1] An emergency brake device for an elevator comprising:

a connecting body capable of being displaced with respect to a sheave which is rotatable;

a brake body provided to the connecting body, which is capable of coming into and out of contact with an outer periphery of the sheave and capable of being displaced in a rotation direction of the sheave while maintaining a contact with the outer periphery of the sheave;

a brake drive device which displaces the connecting body in a direction in which the brake body comes into and out of contact with the outer periphery of the sheave; and

a gripper metal including an inclined portion caused to incline with respect to the outer periphery of the sheave, the brake body being meshed between the outer periphery of the sheave and the inclined portion when the brake body is displaced in the rotation direction of the sheave,

characterized in that the brake body comes into contact with the outer periphery of the sheave and is meshed between the outer periphery of the sheave and the inclined portion, so that rotation of the sheave is braked.

[2] An emergency brake device for an elevator, according to claim 1 characterized in that the brake body is a brake roller rotatably

provided to the connecting body.

[3] An emergency brake device for an elevator comprising:

a connecting body capable of being displaced with respect to a sheave which is rotatable;

a brake body provided to the connecting body, which is capable of coming into and out of contact with an outer periphery of the sheave and capable of being displaced in a rotation direction of the sheave while maintaining a contact with the outer periphery of the sheave;

a brake drive device which displaces the connecting body in a direction in which the brake body comes into and out of contact with the outer periphery of the sheave; and

a gripper metal including: a receiving portion which is displaced in a direction in which the receiving portion is spaced apart from the sheave by being pressed by the brake body when the brake body is displaced in the rotation direction of the sheave; and a biasing portion for biasing the receiving portion in a direction in which the brake body is pressed toward the outer periphery of the sheave against the displacement of the receiving portion in which the receiving portion is spaced apart from the sheave,

characterized in that the brake body is pressed toward the outer periphery of the sheave by the receiving portion, so that rotation of the sheave is braked.

[4] An emergency brake device for an elevator according to claim 3, characterized in that the brake body is a wedge rotatably provided to the connecting body.

[5] An emergency brake device for an elevator according to any one of claims 1 through 4, characterized by further comprising a connecting body position returning device which biases the connecting body against the displacement of the brake body when the brake body is displaced in the rotation direction of the sheave.